An Interview With Li Hung Chang. the Great Viceroy of China, On

THE EXCLUSION OF THE CHINESE.

His Daughter's Wonderful Wedding and a Family Jangle.

THE VICEROY AS A SMOKER

(FROM OUR TRAVELING COMMISSIONER.) TIENTSIN, CHINA, November 30.

HAVE just had a most interesting interview with Li Hung Chang, the great viceroy of China. Li Hung Chang is by all odds the greatest man in the Chinese Empire. He was called by General Grant the Bismarck of China, and in statesman-

ship he ranks with the greatest minds of the European nations. He is practically the Premier of the Imperial Government, is the Chief Secretary of Foreign Affairs, and during the past few years has been the medium of communication between foreign nations and the Celestials. It was he who was commander in chief of the Imperial forces during the great Taiping rebellion, which cost China 10,000,000 lives and which resulted in the overthrow of the rebels. It was he who settled the difficulties with Russia in 1881, and it is he who is called in to advise the Emperor when any crisis takes place in the affairs of the nation.

Li Hung Chang carried on all the negotiations with Mitkiewicz and granted the charter to the Wharton Barker syndicate, which fell through by Mitkiewicz's indiscretion and bad character. It was he who introduced the telegraph into China about even years age, and it is he who is now doing all in his power to have China adopt



Li Hung Chang is the vicercy of Chili, the Peking and Tientsin, and which has a popu-lation of 35,000,000, or nearly as many as Great Britain. Over these people the viceroy has more power than has the Queen of England. He is also superintendent of the northern trade of Chins, and it is said that the money he receives yearly amounts to over \$3,000,000.

CHINESE CIVIL SERVICE. In China office comes, in the first place, from scholarship, and Li Hung Chang is one of the most noted scholars of China. He has passed three public examinations, which means having been three times one of 200 of the successful out of 15,000 competitors, and at the last one he received the highest degree. He is a fellow of the Han. petitors, and at the last one he received the highest degree. He is a fellow of the Han-lin College, the most learned body of China, and he is such an important man in the Chinese Government that when he wished to retire from office about six years ago to mourn on the account of the death of his mother, the Empress refused to give him more than 100 days for griet. She then recalled him to his post on the ground that he was a necessity to China. He now lives

here at Tientsin and his residence makes this point alto of the nations as Peking itself. Tientsin is a city of nearly 1,000,000 people. The foreign settlement where the leading French and English merchants do their business, and where the consuls have their residences, is three miles from the native city. It is here that the ships land, and ere that the foreign hotels are located. Between the two cities is a series of Chinese villages so closely joined as to form a third city, and it was through the narrow streets of these that I was carried by four chair bearers in uniform on my way to my apointment with the Viceroy. No one walks he be a foreigner, through the streets of China. They are too narrow and the crowd is too dense and too dirty. In paying cere-monial visits, one must go in state, and I had one of the Chinese officials of our consulate at Tientsin riding in front of my chair on a white mongolian pony. He had a big round black cap upon his head with its brim turned upward and a gorgeous red tassel covering crown. His powerful body was covered with a rich blue silk gown, down the back of which hung his long, thick, black cue. His legs were clad in pantaloons of wadded silk and great fat boots with white soles an

## TRAVELING IN STYLE.

inch thick covered his feet and ankles as he

My chair was a fine sedan covered with a rich navy blue cloth and lined with silk of a delicate blue. It was swung between poles about 25 feet long and the four men who carried it walked in couples, two in front and two behind between the shafts and supported it by great bars of teak wood. which, resting on the shoulders of the men, were fastened to the shafts and thus enabled he men to move in single file. It took us half an hour to make the journey between the two cities. We were often stopped by long lines of wheelbarrows loaded with merchandise and pushed and pulled by coolies. The weather was bitterly cold and shivered in a heavy overcost and under a thick rug which was wrapped around my to the waist, and I passed a beggar who, as naked as Adam in the Garden of Eden, was crying and shivering under a piece of coffee sacking which he had thrown about his bare We crossed a stream, passing thouand at last came to a high wall, on the out-side of which about two score of ponies were

standing tied. This wall surrounded the Yamen, or the gubernatorial residence of the great viceroy. We passed through a great gate and came into a court which was full of the servants and lackeys of mandarins. We stopped for a moment before a pair of large double doors upon which were painted two hideous figures which I was told were the gods of war. A moment later we were conducted past these into another court where was another retinue of lackeys all in pigtails and gorgeous uniforms. Here my chair was set down for a moment and the Chinese official from the legation took my card, a strip of red paper about eight inches long and three inches wide, upon which were painted in black the two Chinese characters, which indicated the translation of my name. A moment later I was conducted into an ante-room, where the secretary of the vicerov, Mr. Lob Feng Luh, who had arranged the

interview for me, received me. WAITING UPON THE VICEROY. The crowd in the ante-room and that in which I was received made me think of the White House at the beginning of a new administration. There were hundreds of vellow-taced, almond-eyed men, who looked as such they might be office seekers, in the ante room, and the lew who sat in the reception room were evidently dignitaries of a high degree. They were long black silk gowns lined with sable and other fine furs, and their hats were decorated with the butcock feather in his cap like that worn by the Chinese Minister at Washington, and another was a mandarin of the red button. The room itself was a shackley looking affair about 20 feet square, and its walls were covered with a cheap paper pasted over bare bondrs. A wide divan covered with red cloth, which, in China, means prosperity, ran around it and upon this were placed little tables about two feet square and about six inches high. The mandarins seated themselves one on each side of these tables, and thus we'sat in couples about the room. The servants brought in tea and we sipped the choicest of the Chinese liquid while we waited. The mandarins smoke pipes, and each had his servant beside him to fill his pipe for him when it became empty and to light it when it went out. Now and then a new arrival would be ushered in, and then all would arise, bow two or three times, shake their own hands, which is the mode

of salutation in China, and smile all over their fat yellow faces. Mr. Loh Feng Luh, the Viceroy's Secretary, and also one of the great men of Tient-sin, speaks English perfectly, and I find him a man of broad reading and much information. He discussed with me during the waiting some phases of the Spencerian philosophy, told me how far he believed in the theories of Huxley and Darwin, and. the theories of Huxley and Darwin, and, speaking of the latter, said he liked to believe in the survival of the fittest, but not in the origin of species. He seemed pleased when I told him I had read Confucius, and had decided opinions upon Emerson and Car-lyle. He was for a long time connected with the Chinese Legation at London, and has also been stationed at Berlin. It was he who accompanied me into the presence of the Viceroy, and who acted as interpreter of

the conversation. A CHILLY RECEPTION.

We went through I don't know how many rooms and narrow passages. There are, I am told, many more than a hundred rooms am told, many more than a numered rooms in the yamen, and a liveried official preceded us, holding our red cards high above his head as he did so. The house seemed old and not very well furnished, and the ro m into which we were at last led was carpeted with a dingy brussels carpet which looked as though it might have come from a Washington boarding house. It was the reception room reserved for foreigners. It had foreign chairs and lounges, and at one end there was chairs and lounges, and at one end there was a raised platform lighted with a window at the back and furnished with a divan, which was covered with red silk. It had atable also covered with red silk, and I suppose that here it is the Viceroy sits when he receives Chinamen. There was no fire in the room with the bride would select the one which pleased her most, and which according to presents were sent by each person, the idea being that the bride would select the one which pleased her most, and which according to presents were sent by each person. here it is the Viceroy sits when he receives Chinamen. There was no fire in the room and the cold made it seem almost barn-like. The viceroy himself, who seemed to fill the whole of it with his august presence, was not warmer than his surroundings, and his tall frame clad in a long gown with a short seal skin cloak, in the long sleeves of which his hands were clasped together as he salut-ed me instately style upon my presentation, was rather productive of chilliness. A cold shiver ran down my back as he motioned me to one seat and took another 15 seet disant on the other side of the room. The Secretary sat between us, and we conversed through him, our words almost freezing as they ricochetted through Mr. Loh from one It does not take more than two sentences

to show the person who talks with Li Hung Chang that he is in the presence of no ordinary man. His words come out quick and sharp. He asks the most direct of ques-tions in tones which show that he expects an answer, and while he demands all kinds an answer, and while he demands all kinds of information from you, he gives you just about what he pleases in return. His figure is a most impressive one, well formed, he stands 6 feet 2 in his stockings, and his long silk gown makes him look like a giant, while his hat, which he wears at all times, adds to his stature. His shoulders are broad but slightly stooping. Still in his 67th year, his step is springey, and his his 67th year, his step is springy, and his only signs of age are in the gray of his hair and whiskers. His yellow complexion shows few wrinkles, and his twinkling almond eyes look out through black spec-tacles. He shaves his head like all China-men, and his long cue is as white as the driven snow. His sparce mustache and his thin whiskers are also gray, but his face is thin and he has nothing of the round fat appearance of the Chinamen of America. Still, he is a pure Chinaman, with no Tartar blood in his veins, and he comes from one of the old aristocratic families of the

INTERESTED IN HARRISON

His first words to me were about General Harrison. He wanted to know if I knew him and I told him I did. He then asked as to his profession and as to how he stood in it. He was especially solicitous as to President Harrison's views on the Chinese question and he requested me to tell the American people through my pen that he did not at all approve of the exclusion of the Chinese from the United States. Said

"The passage of the exclusion act is entirely contrary to the spirit of the treaty relations between the two countries. It is an outrage and I hope it will be repealed, and I wish you to tell the American people for me that if it is not repealed, I propose to advise our Government to exclude the Americans from China, and I think it will be no more than right if we do so. You may amplify this as much as you please and I trust that you will put it in so strong a light that the American people will do justice to

our nation. These were the words of the Secretary of Foreign Affairs of the Chinese Empire, write them here not more than one half hour after they were uttered. I do not think it necessary to amplify them and it seems to me that they are strong enough in the words of the Viceroy himself.

The conversation next turned to railways and the Viceroy asked me if I knew Mr. Wharton Barker and as to what was his profession. I told him that I was not personally acquainted with him, but that I knew him to be a banker of high standing and great wealth. He then asked as to Count Mitkiewicz, and upon my saying that I had met the gentleman and had re-ported his story of the granting of the charter, to the New York World, he replied that did not like Mitkiewicz, and that "he was no gentleman."

The scheme, however, I understand, of founding an American bank with the great powers spoken of in the Mitkiewicz combination, is by no means dead. It will prob Count left out, and I happen to know that the Vicerov is very anxious that Mr. Wharton Barker should come to China, and also that Mr. Barker has signified serious intentions of so doing at no distant date. The Viceroy is anxious that American capital should be brought here. He was disap-pointed when the other scheme fell through and he would like nothing better than to see sands of jinrikshas and going all the while through the most crowded of narrow streets self as having been the part of an enterprise

In our conversation, however, there was no such talk as this. I asked the Viceroy as to whether the scheme was on again, but he retorted by asking mea hundred and one questions which made my head boil in constructing diplomatic answers to them which should not implicate myself nor my friends and I wished a dozen times that I had neve mentioned the subject. The fact, however that the scheme is not dropped still stands

CHINA'S COMMERCIAL FUTURE. I asked the Vicerov as to what he though of the future of railways in China and as to their effect upon the country and the world.

He replied:
"Before half a century has passed China will be covered with railways as with a net. Its immense mineral resources will be de veloped. It will have rolling mills and fur naces in many parts of the country, and it i not impossible that it may do the manufacturing for the world. It seems to me that the most serious question which menaces the working people of your country and Europe lies here. The Chinese have shown themselves to be as skillful and as intelligent as any people in the world. They will work hard and they can live cheaper than your people, and when our country is open to railways and it has turned its attention to supplying the markets of the world, I be lieve it can supply them better and cheaper than you can. This is a question that you will have to face."

"I think so, too, your excellency," said I.
"Then I wonder," replied the Viceroy,
"that you wish to have China come into competition with you. Do you not consider "Yes," I replied, "we do. But if the time ever comes when Chinese labor thus working in China comes into competition with American labor we will build a wall of protection about the United States so high that none of your products can come

The Viceroy then asked me as to my tour and as to my newspaper correspondence. He asked me why I traveled and it seemed to surprise him when I replied that it was for the purpose of making money out of my letters and of improving my mind by meet ing such distinguished men as himself, and by being able to write intelligently of ther thereafter to the American people. At thi moment a servant in livery brought us thre bubbling glasses of champagne and drink-ing this together, the interview was over. The Viceroy offered me his long finger-nailed hand, pushing it far out of his fur cuff as he did so and he walked with me to the door and down the hall of the yamen. Our interview lasted fully half an hour and after the ice was thawed it was a most pleasant one. His excellency smoked dur-ing the whole of the interview and I was furnished with a Turkish cigarette. The Viceroy smoked a pipe which had a stem at least four feet long and which was held to his lips and lighted by a servant. It was a water pipe and the smoke was drawn through the water with a bubbling sound as we talked. About 10 whiffs consumed the tobacco in the bowl and then the servant had to slip out the metal bowl, blow out the ashes, refill the pipe, relight it and put it back into the Viceroy's lips. It was a curi-ous proceeding and it seemed a lazy one. A HIGH-LIFE WEDDING.

All Tientsin is just now excited over the marriage of Li Hung Chang's daughter. It took place this week and the three days' wedding was the greatest event of the year. I saw some of the flowers at the yamen as I passed through, and I am told that the wedding gifts filled three rooms. Some of the presents were of jade, pearls and precious stones, and there was a great amount of silk and velvets. Li Hung Chang is superintendent of trade for northern China, and all of the great merchants made presents to the bride. The manner of sending the presents was, in the case of small things, on trays etiquette, ought to be the least valuable of the lot. The Chinese at this wedding showed their great love for foreign things. They bought out the entire effects of a French store in the foreign settlement, and one of the noblemen took a lancy to a big-figured, old-fashioned brussels carpet of a patter common in America a generation ago. This carpet had been in the store for years and none of the foreigners would buy it. The Chineman's eyes lighted up as he took in its gorgeous figures. He said: "I want that its gorgeous figures. He said: "I want that for the Viceroy's daughter." He was of course charged a good round price for it, and it duly appeared at the wedding. The bride was dressed in red, and her head, it is said, was so heavily decked with jewels that it had to be supported by others during a part of the ceremony. She is 23 years old, and is said to be rather pretty.

The Chinese gossip just as do their American sisters, and the story now afloat in the high circles here is that the Countess Li

high circles here is that the Countess L Hung Chang, the Viceroy's wife, was de-cidedly opposed to the wedding. It is said that she read the Viceroy a curtain lecture in choice Chinese when he announced to her that he was about to give his daughter to Mr. Chang Pei-Lun, and said that the groom was 20 years older than the bride, and that he had no rank. The truth of it is that the groom had a high position some years ago, but he was disgraced on account of his dealings in connection with the French-Chinese war, and his rank was taken from him. To continue the gossip, it is said that the Viceroy replied to the Countess that his new son-in-law had really great powers of mind, that he would be given another office, and that he would eventually be even a greater man than himself.

"Then," responded the Countess, who, though she dictates to the Viceroy, really admires him, "he will have to be the Emperor himself, for there is now no greater man in China than my husband." And so, in the words of a fairy story, "they were married, and it is to be hoped they will live happy ever afterward."
FRANK G. CARPENTER.

WHAT DREAMS ARE MADE OF.

ome Interesting Experiments That Prove They Go by Contraries.

From time immemorial, dreams have been the wonderland of waking hours. Hope and fear have wrought them into their own fabric. Superstition has seized upon them and worked up a curious ritual of "dreams that go by contraries." of "dreams of the morning light," of dreams with significances, some of which seem natural enough, while to a few of those apparently most arbitrary, science herself has offered a certain amount of explanation.

Dreaming is an experience which may be called common to humanity, though it varies so widely in different individuals that, in a few exceptional cases, it is absolutely unknown. A French physiologist caused many curious experiments to be made on himself during sleep. These experiments took the form of trifling physical sensations, which produced almost invariably a wonderfully exaggerated effect on the sleeping mind. Thus a feather tickling the lips was converted into the horrible punishment of a mask of pitch being applied to the face. A bottle of eau de cologne held to his nose sent him into a dream of a perfumer's shop in Cairo. A pinch on the neck recalled the days of his boyhood and the old family physician applying a blister to that region. Scientific writers admit that there is a type of dream in which coming physical disease or diseaster is shadowed forth-some bodily sensation, perhaps too slight to be noticed by the subject when awake, yet contriving to impress itself in some symbolic form on the sleeping mind. The more striking instances of this sor may serve to explain how, in some lesser degree, certain symbols are likely to attach themselves to certain painful sensations or conditions, until at last they are finally ac-

cepted as mysterious presages of evil. Conrad Gesner, the eminent naturalist dreamed that he was bitten on the left side by a venomous serpent. In a short time a severe carbuncle appeared on the very spot terminating his life in the space of three days. It is a most singular fact that under certain combined conditions of fatigue, discomfort and malaria, whole bodies of men -such as companies of soldiers—have been seized by the same terrific dream, and have awakened simultaneously, shricking with terror. Such an instance is related by Laurent, when after a forced march 800 French soldiers were packed in a ruined Calabrian monastery which could ill accommodate half that number. At midnight frightful cries issued from every corner of the building as frightened men rushed from it, each declaring that it was the atode of the evil one—that they had seen bim, in the form of a big black dog, who threw himself upon their breasts for an instant and then disappeared. The men were persuaded to return to the same shelter on the next night, their officers promising to keep watch beside them. Shortly after midnight the same scene was re-enacted—the same cries, the same flight, as the soldiers rushed forth in a body to

escape the suffocating embrace of the black dog. The wakeful officers had seen noth-ing. Inharmonious Chicago Tribune. George-That is a beautiful piece, Laura, and you have played it most soulfully. But what is that rumbling noise I have

been hearing nearly all the time since I Laura-It must be the wind. Excuse me a moment. (Goes into the kitchen.) Mother, can't you take that washtub into sement? It doesn't chord with

A Few Rules for General Deportment in Everyday Life.

THE GALLANT FAT MEN OF FIFTY

Who Desire to be Modeled Into Fashionable Men of Society.

HOW TO GREET A LADY ON THE STREET

[WRITTEN FOR THE DISPATCH.] "There is nothing so commonplace in all the world as the meeting of people every day, and yet there is nothing so really un-

as the man who knows just how to conduct himself under these circumstances." This was the dictum of the manager of a dancing

academy. He has made the study not only of ball etiquette, but gen. eral deportment the specialty of his life, and has devoted so much conscientious attention to it that he is regarded as an authority upon the nice points of conduct by all who know.

common and rare

An Old Stule Rose. "The high art of being a gentleman cannot, of course, be acquired by mere training. There are essential to the completeness of the character some inborn traits, and yet it is quite possible for men who do not possess them to pass for gentlemen because they have mastered the rules of deportment." "Are the rules of deportment set down in

the text books?" "No. There are books on etiquette, but the matters I refer to are seldom to be found in them, at least, with any adequate treatment. I usually give my instruction by

TEACHING DEPORTMENT. "Do you ever have pupils who come to you for the express purpose of learning de-

word of mouth or by example."

portment?" "Very many, and they vary in age from little children of 6 years up to fat men of 50. It is by no means uncommon that a man past middle age comes to me to take his first lesson in dancing to learn how to carry him-



The Present Proper Mode self in the street or in the car. It is a cu rious speculation as to what leads them at that time of life take up this study. It would seem as if anybody who was inclined to attend to it at all would surely have done so in his younger days, and I really suspect that my middle-aged pupils are parvenus. I do not mean to use the word in the disa-greeable sense, and in fact, I think it is very commendable that a man who has sud-denly acquired wealth or had gained some years of leisure by hard labor, should un dertake to fit himself as well as may be for his new position in the world." "How do you go to work to teach an old

man these matters?"
"Just as I do with children. I teach them first to walk. As a rule, men walk best when they walk naturally, but when they come to pay particular attention to matters of gait and carriage, they are almost always inclined to some eccentricities of movement which have to be corrected. It is always the case, too, that men who come to me wish to learn to dance, and I put them through the initial lessons with a cultivating two things, grace of carriage, which includes an easy, unconscious control of the limbs, and the technical figures of the dance. As the lessons progress, of course, I teach the pupil the etiquette of the ballroom, and it will generally follow that who-ever behaves in good form in the ballroom will not go amiss elsewhere."

HOW TO BOW. "Is there a recognized mode of bowing?" "Yes, there are two. One style, that has really passed out of recognition, is still seen in the case of gentlemen of the old school as we term them. Their method of bowing is a relic of the minuet, and if you



An Introduction

member it. The gentleman places his right hand upon his heart, and bends over very low, and, as I say, only gentlemen of the old school or persons who do not know any better and try to ape matters with which they are not familiar, adopt this method. The proper bow of to-day is a far less conspicuous movement. The hands should be kept at the side with the arms straight. People who are conscious of their arms and hands probably will never learn to bow correctly, and those who have become selfpossessed in matters of carriage can usually keep their arms at their sides without their appearing to be stiff or in the way. With the arms at the sides, the bow of to-day the arms at the sides, the bow of to-day should be made by a slight inclination of the head. There should be just enough of this forward movement to be perceptible and no more, for then there would be danger of a burlesque of the form of recognition."

"Is this method of bowing the right one to be used when being presented to leder to be used when being presented to a lady either in the hallroom or in a parlor?"
"Yes, there is only one form. When you are presented to a lady, you should make this respectful inclination and make no adit. The custom of shaking hands is not by any means reprehensible, but it is not con-sidered the proper thing for a gentleman to offer his hand to a lady unless she makes it evident that she is willing to receive that greeting. Those who are well trained in deportment can meet each other in a formal way and shake hands without any embar-

way and shake hands without any embarrassing pause or hitch, so quickly do they
see what is the proper thing to do. The
lady does not bow in the ceremony of introduction. Her greeting is entirely with the
expression of her face unless she chooses to
shake hands. There is no rule to say
whether she shall do so or not excepting
that at very formal receptions that feature
is to be avoided. When there are a great
number of persons to be introduced to,
unless the guest is a distinguished person,
it is better to avoid the latigde and annoyance that results from shaking hands. But
in a private introduction there is no reason in a private introduction there is no reason of etiquette why she should not grant that favor to any gentleman whom she meets for the first time."

WHEN YOU MEET A LADY. "Is there no recognized form of greeting ly upon the street?'



always lift his hat. If you were to go out upon a public promenade and watch the people as they pass, you may probably see a hundred different ways by which the gentlemen in the throng greet their lady friends. Some men simply bow, bome make an off-hand salutation with the arm without touching the hat, others put their fingers to the rims of their hats, others tip the hat a little forward over their eyes with removing it from their heads, and from this there are all degrees to that absurd practice that prevailed a few years ago of taking the hat off and rapping the chest with it. That was a silly fad and is happily entirely gone

"The proper form consists in taking the hat by the forward part of the rim and lift-ing it entirely clear of the head but not away from it. It may be swung forward very slightly in order that there may be no stiffness in the salutation, but a good rple to follow would be to carry the hat forward from the head until the back part of the rim is just above the forehead, no further than that. The hat should be immediately re-placed and the arm allowed to drop to the side, and this salutation should be accom-panied, as far as possible, by the bow which I spoke of before. One rule which many men who salute very grace ully do not understand or forget is this: you should al-ways lift the hat with the hand that is

away from the lady. SHOW YOUR FACE. 'It is a recognized law of all deportment, whether in the ballroom, the parlor, the

nizing of ladies and friends upon the street.
When you are upon a public promenade
where you are liable to meet your friends
several times in the course of a walk name ing back and forward, it is not necessary to you tip the hat every time you meet the lady in the same day it becomes an exag-



No Place for His Hands and Feet, gerated recognition, so that its respectful quality is lost. Raising the hat the first time you meet your friend is like passing the time of day, and after that it is much better simply to bow alightly or even to

"Do you ever have to teach men the roper method of sitting in chairs?" "Yes; that is an important matter and one that displays a man's bad breeding about as quickly as anything. The worst you can do when seated is to cross your legs in an ungainly fashion. A general rule to follow in such a matter as this is to avoid making the legs conspicuous. It is much the best plan, therefore, to sit with your both feet squarely upon the floor and close together. Your hands may be occupied according to circumstances, and if you are listening and merely waiting, they had better be upon the lap without being folded."

THREAD SPOOLS.

Where and How They are Made and Polished-Shoe Pegs by the Bushel.

American Analyst.]

Among the peculiar industries which flourish in western Maine is the making of thread spools. They are cut from smooth, white birch timber-a wood which works easily-by various kinds of improved machines. There are numerous mills throughout the lumbering region, where the birch is sawed into strips about four feet long and from one or two inches in width and thickness. These strips then go to the spool factories, to be converted into spools The processes they are put through are num ing them, is quite interesting. A barrel is filled nearly full of them and then revolved by means of machinery and belting until the spools are worn smooth by rubbing one against another. Spool manufacturing is the most important industry in several vil-lages of Oxford county, and will doubtless continue so until the supply of white birch timber is exhausted. The manufacture of timber is exhausted. The manufacture of shoe pegs is another peculiar Maine industry, though shared in to some extent by other New England States. These are cut from maple and white birch by machinery, and are worth at the factory from 35 to 95 cents a bushel. The compressing of sawdust is also a flourishing business in Bangor in that State. There is a firm these stelling that State. There is a firm there styling itself a "Compress company," who convert sawdust and shavings into solid bales by compression, which find ready sale in the large Eastern cities. vance whatever unless she gives the one to

THE STORY OF IRON. India the First Country to Utilize This Gift of Nature.

PRIMITIVE MODE OF SMELTING.

Mineral Coal Used in the Manufacture of Iron as Early as 1619.

WONDERFUL STRIDES MADE IN AMERICA

[WRITTEN FOR THE DISPATCH.]



NDOUBTEDLY iron is one of the most important agents in man's civilization. It is also one of the most widely distributed of metals. It is never found in a pure state save in meteorites, and in its common form of ore it is only separable from its impurities

so high, indeed, as to be obtainable only by some artificial blast. Save bronze only, it is the oldest of metals in use, and, being so widely distributed, so universally known, it would probably have been first used but for the difficulties incident to its separation from the impurities of the ore. first produced in India. From Egyptian 1870

by the application of a high degree of heat-

At what time iron was first made, we are unable to discover, though it was certainly monuments we learn that it was in use in Egypt certainly as much as 4,000 years ago. The industry is very ancient in the South and West of England where the traces of the old Roman period are found in the ashes of their works.

The primitive mode of smelting in Asia and India was very crude, consisting simply of a hole dug in a bank, or mass of clay, with a small opening at the bottom for the introduction of a weak blast, which was made with a goatskin bellows. The hole was partially filled with charcoal and "iron sand" (oxide of iron of 72 per cent purity being required) placed on top. By this means sufficient heat could be made to reduce the mass-the oxygen being consumed and leaving the iron to sink to the bottom of the pit. Of course the iron contained a considerable amount of impurities, yet it was tolerably clear. By renewing the char-coal and sand alternately from 5 to 200 pounds could be made, depending on the length of the blast.

A CRUDE PROCESS. Iron ore could not be used successfully in this process because lime to a considerable quantity must be introduced that the refuse may be made fusible, though in rich ores but a small amount is required. The iron was removed from the pit while still hot and hammered, and then reheated and ham-mered again until most of the cinder was removed and tolerably good iron obtained.
This rehammering in later times being usually done by water power, tended to locate the industry where such power was

obtainable. This crude and simple process was practiced by barbarous and civilized nations alike down to the eighteenth century, though of course with some improvements in the instruments. In the mountains of in the instruments. In the mountains of Spain as early as 1293, a cylindrical hearth about 11 inches deep was introduced into the bottom of the "furnace," which gave a considerable increase in the productive power—making about 140 pounds in five hours. Yet the principle was the same and charcoal the only fuel. To this day very large amounts of iron are made by this prin.itive method in Sweden and the United States, and it is the sole process among the less civilized peoples. In the United whether in the ballroom, the parlor, the street, or on the stage, that no gesture should be made in such a way as to hide the face behind the arm or hand. Therefore, if the lady approach you upon your right-hand side, you should lift the hat with the left hand. Some men seem to have the idea and Tennessee—comprising in 1882 about that it is very bad form to salute with the left hand. Some men seem to have the idea that it is very bad form to salute with the left hand. As a fact, it is much worse to put up the right and thus conceal your face or partially hide it from the party whom you meet.

elers are frequently impressed with the excellent quality of their iron and steel. In the "Middle Ages" Damascus steel was famous throughout the world, and the famous Swedish iron is almost entirely made from charcoal. But the process is rapidly dying out from natural causes. It is at-tended with enormous consumption of wood and soon exhausts the forests. As much as 300 years ago, in Elizabeth's time (1574) the English Parliament, alarmed at the de-struction of the forests, forbade the establishing of new iron works within a certain distance of London and the River Thames, and about 100 years later some British crown works in the southwest of England were closed up to save the wood for naval purposes. Before the eighteenth century the English manufacture seemed to be dying out, and had ceased altogether in many localities. In 1740 the total production reached but 17,000 tons, about the same as the present State of Connecticut. In Wales the present great fields seemed to be getting useless. In 1750 this brought forth an ac of Parliament admitting American colonial iron free of duty. The whole feature of the progress of that day was that the industry was pushing ahead into the uncivilized wilderness. Under such a state of affairs the present modern manufacture was clearly

THE ADVENT OF COAL. Down to this time coal had been used for

domestic purposes, and to some extent by smiths. It had been used probably as early as the ninth century, and certainly not later than the twelfth, though not to any great extent. It was probably thought to be un-healthy, for with such resources it is hard to account for its limited use on any othe supposition. It seems reasonably that as early as 1619 one named Dud Dudley smelted iron by the use of mineral coal. He carried on the industry successfully for several years, making iron at a greatly reduced cost and of good quality. He was much persecuted by rival manufacturers, who excited the popular prejudice against him. His mill was much damaged by a flood, and was eventually destroyed by a mob in 1640. Overcome by continuous misfortune, he eventually succumbed and died a pauper, carrying his secret with him to the grave. Though numerous experi-ments were tried, the next that gave promise of success was that of Abraham Darby, who first submitted the coal to the process wood undergoes in being converted into charcoal—making a sort of coke. In 1757 coke was first successfully applied to iron. Then in Cheshire it was discovered that coal could be used. The manufacture at once began to grow, but it still seemed that peo-ple had no idea of the possibilities of the ple had no idea of the possibilities of the industry. As late as 1755 a district in the mountains of Wales of the finest coal and and neither party at the time realized the good bargain the lessee had made. to the iron-it was much inferior to char

In the early stages of the manufacture the use of coal communicated many impurities coal iron. But the process of converting pig iron into bar iron was soon discovered. In this operation the iron is brought in contact with the flame only. The effect of these discoveries was wonderful. From 17,000 tons in 1740 the production ruse in 1788 to 60,000 tons. In 1796 it was 125,000; in 1806 is was 250,000, and in 1882 it was 8,400,000 tons, an inconceivable amount, and a five hundred fold increase in less than a century

WATT'S IMPROVEMENTS. Of course this shows the effects of m than the improvement mentioned; but these and the application of steam power to the industry lie at the root. Watt made improvements that increased the blast by steam power-which of course increased the

smelting powers of a furnace. His improve-ments were felt about the period 1788-1790.

Up to this time the increase in the manufacture had been large. But from this time

factore had been large. But from this time on, to draw a comparison, the increase was in a geometrical as distinguished from an arithmetical ratio.

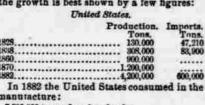
It had long been noticed that better iron was made in winter than in summer, from which fact it was reasoned that an artificially cold blast was the best. But a shrewd Scotchman named Neilson thought differently. He reasoned that a hot blast would save immensely in the fuel required. But it was only after the most discouraging efforts that he found one willing to change his furnace to try an experiment so contrary to accepted belief. Neilson eventually took out a patent in 1828. The success was great, the result being the immediate saving

out a patent in 1828. The success was great, the result being the immediate saving of from one-third to one-half the fuel required in smelting. The improvement gave Scottish iron an immense impetus, but it was soon adopted in England and the United States.

Down to the middle of the eighteenth century cast iron was unused; but with the introduction of mineral coal it became a great feature in the manufacture. Its production naturally involved the making and handling of great castings, which in turn reacted on the manufacture and stimulated inventions for handling great masses of iron, steam power being the great agent.

steam power being the great agent.

The history of the industry in the United States is equally wonderful. In 1838 the first furnace was built in Eastern Pennsylvania. It was 21 teet high and made two tons of iron per day. The furnaces now are from 60 to 70 teet high, and produce from 120 to 140 tons per day. 120 to 140 tons per day. The magnitude of the growth is best shown by a few figures:



manutacture: 7.200,000 tons of coal and coke. 3,200,000 tons of lime. 8,600,000 bushels of charcoal.

Yet this is but one-fifth of the world's production. In 1882 the world's production was 20,000,600 tons, of which Great Britain produced 8,400,000 tons, and the United States 4,200,000.

THE AGE OF SOFT STEEL.

Malleability in iron is of great use in many ways, and this gave charcoal iron peculiar value; "puddling" iron is a process to make it malleable without its process to make it malleable without its being taken directly from the ore. In 1882 out of 4,200,000 tons produced in the United States 2,500,000 were puddled. But puddling is rapidly declining since the introduction and use of soit steel. Steel was very anciently made in India. It was first introduced into Europe in the thirteenth century, but being very costly its use was limited to special purposes. The immense developments in the steel industry are the history of to-day. By the Bessemer process, with a simple blast, from 5 to 10 tons of steel are converted in from 10 to 15 minutes, without use

verted in from 10 to 15 minutes, without use of fuel and at a very little additional cost over iron. The magnitude of this change is seen from the fact that in 1887 the total product of steel was 2,400,000 tons, while in 1882 it was 6,200,000 tons. In 1872 only 4 per cent of our iron was made into steel, while in 1882 33½ per cent was converted. The finest steel, however, such as goes into

The finest steel, however, such as goes into razors, needles, surgical instruments, etc., is still made by the old crucible process.

The fact that the richest ores are found in the oldest deposits, geologically speaking, while coal is of the later "carboniferous" age, has tended to locate the modern iron manufacture away from the ore fields. It has always been more advantageous to transport the ore to the fuel than vice versa—a great natural advantage to England and Pennsylvania. But the course of modern improvement has tended constantly to reduce the amount of fuel required and is rapidly reducing their advantage. Georgia duce the amount of fuel required and is rapidly reducing their advantage. Georgia and Alabama are the most favored districts in the world—the coal and ore lying side by side. When we realize that transportation enters into the cost of production in Pennsylvania to the extent of \$5 every ton, we see the extent of this advantage and the possibilities of the future changes.

From the enormous consumption the

From the enormous consumption the English ores are rapidly giving out. Large amounts of ore are already imported into England from Spain, Germany, Sweden and Alagaia and Javana and Alagaia and Javana and Alagaia and Javana and Java ital have been invested already in opening

up these ore fields by railroads The great revolution seen in the iron in dustry differs from the changes seen in the cotton and woolen industries, in that it shows itself more in the quantity and ches ness of the iron production made possibl rather than any great or material change in qualities, and the world-wide distribution of the manufacture

The production of iron is now practically unlimited in amount and in its area of pro-duction. The manufacture is no longer confined to wooded wilds, but is world-wide. Any monopoly of the iron manufacture has become impossible. It is true that some particular countries have advantages in the essential elements of manufacture, but they are slight. Every great nation has sufficient production for necessary uses and delenses, and at but a slight increase in cost. It is an industry in which the world has shared, and in which other countries have as bright prospects as England has ever had.

RELIGIOUS SUMMARY.

THE Queen of Madagascar has presented Mrs. Mary Clement Leavitt with a gift of \$100 as an expression of her interest in the total

THE receipts of the Congregational Union the last year were \$134,725, an increase of \$7,800 over last year. Forty-one parsonages and 104 churches were aided in the last 12 months.

THERE are 40 prosperous Congregational Churches in Southern California and half as many more preaching stations soon to become churches. There are on the field already as

THE will of the late Joseph B. Hoyt, or Stamford, Conn., bequeaths \$50,000 to the American Home Missionary Society, one-half to be used in the current work of the society and the other half as an endowment fund. A like sum is given to the American Baptist Mis sionary Society to be used under similar condi

THREE thousand out of the four thousand people on the Island of Mase, of the Loyalty group, in the South Pacific, are now Christians. and they are well clothed and comfortable housed, and are remarkable for their industry and thrift. By this industry they are not only able to support all their churches, schools, and other institutions, but also to send a goodly sum to the Society in London.—Spirit of Mis-sions.

THE Congregational Union of Victoria has inaugurated a jubilee fund of \$500,000. One layman of the church, Mr. G. W. Taylor, proposed to contribute \$150,000, at the rate of \$50,000 per annum for slow, at the rate of \$00,000 per annum for three years, if the Congregationalists of the colonies would raise a similar sum; or he would make it \$10,000 a year for five years if they would raise another \$50,000. The latter challenge has been accepted with great enthusiasm. The money is to be largely used in founding a theological seminary.—Nashville Christian Advocate.

In the last full fiscal year the total amoun given to foreign missions through the Church of England societies was \$2,300,000, in round numbers; through Nonconformist societies in England and Wales, \$1,800.000; through joint societies of Nonconformists and Episcopalians, \$900.000; through Scotch and Irish Presbyterian societies, \$1.000.000; through Roman Catholic societies, \$50.000. The Presbyterians and the Nonconformists, as a "whole, are making long leaps toward the front in the work of evangelizing the world.—The Interior.

GIVE the people the facts and get them to praying over missions and we will win a great victory this year. Prayer under a haystack at Williams College started foreign missions in America. A great wave of prayer has lifted the cause in every crisis into new triumph. For weeks this "burden" has been on my heart to beseech the church to pray for missions as never before. We must have a revival in zeal for the salvation of the world. Prayer is the power that will secure it. "To your tents, O Israel!"—Rev. J. Q. Peck, D. D., in New York Christion Advented.

WAR or no war! Dr. Bull's Cough Syrup must be included in every army's supplies.

## LOVE AND MADNESS.

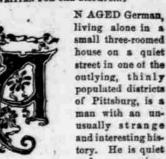
A Strange Story of a Recluse Whose Life Was Made Miserable

BY FATE'S INSCRUTABLE DECREE.

Why a German of Aristocratic Birth Left Fortune and Friends

TO WORK FOR A LIVING IN PITTSBURG

[WRITTEN FOR THE DISPATCH.]



usually strange and interesting history. He is quiet and unassuming, with a kindly face and dark, intelligent eyes. His countenance bears the unmistakable traces of past suffering and present sorrow patiently borne. He must have been a fine-looking man when young, and even now there is something strikingly handsome in his wrinkled face. In his habits he is almost a perfect recluse, and though hundreds of people know his name and have a speaking acquaintance with him, probably there are not five persons in the whole city who ever talked to him on other than business topics or even heard from his lips any words except those of ordinary civility. His manners are those of a perfect gentleman, yet so reserved that

of intimacy with any persons with whom he may come in contact. This remarkable man earns enough to supply his wants, which are few and simple, by working at his trade of carpet weaving. On a small set of shelves in the same room that contains his loom is a small number of dingy-looking and well-worn volumes. If the curious visitor should take the trouble to examine their titles he would find among them Latin and Greek lexicons, the works of Horace, Virgil, Juvenal, Homer, Æschylus, Plato and other classic writers, as well as a few volumes devoted to metaphysics, and works dealing with some of the most abstruse questions ever dis-cussed by those deeply learned in the nat-

it is perfectly plain to all that he neither

invites confidence nor desires to be on terms

urnl sciences.

But the bookcase is always kept locked and no one save the owner is ever permitted to finger the precious volumes. Astonished to see such a library in the possession of a poor carpet weaver, a visitor one day asked the old gentleman, who for the purpose of this narrative we will call Mr. Weber:

"Do you ever read these books?"
"Sometimes," was the laconic reply.
And there the conversation ended. The man who had broached the subject waited for Mr. Weber to say something further; but the latter, who had volunteered as much information as he cared to began hand. information as he cared to, began banging away at his loom as if he
feared more questioning. The old
man was certainly averse to gratifying idle
curiosity, and excepting on one occasion,
was never known to converse with any of his neighbors or acquaintances on personal matters. And it is doubtful whether Weber would have spoken as he did in this

Weber would have spoken as he did in this particular instance had he not been prompted by feelings of gratitude and friendship toward one whom he regarded as the saver of his life.

It came about in this way: The woman who lives in the cottage nearest Weber's had missed the familiar figure of the old weaver, with his back toward the window, from his accustomed seat at the loom for from his accustomed seat at the loom for three days. Fearing that some ill had befallen him she sent her son, a manly young fellow of 20, over to see if their neighbor rus ill. Jacob, the young man, knocked at Weber's door, but hearing no response pushed it open-it was not locked-and entered. There was no one in the weaving room, but the half opened door of the littl ention, and thither he went. He found the old man on his bed, alive, but half famished and suffering terribly from rheumatic pains

Jake got food, summoned a doctor and ministered faithfully to Weber's wants until the patient had fully recovered. The old man became warmly attached to his kind-hearted nurse and one day told him the story of his life in about the following

words: "I have been in this country now over 40 years and have never told my history to but one person. That person the man who befriended me I came here almost penniless and utterly heart-broken. I have a great liking for you, as well as feelings of the strongest gratitude. It is but fair that you should

know my story.
"To begin with, my name is not Weber at all. What it is matters not at present, but you shall know some day. It is written in each of the volumes on yonder shelves, which contain the only worldly possessions that I value. When I die the books shall be yours, for I could not bear the thought of them falling into careless hands. It will suffice to say that I have a right to a 'von before my name and that there is an ancient and honorable title in the family. I received a university education and was betrothed when a young man to a beautiful and accomplished lady belonging to a family of equal rank with my own. I loved her with a love that amounted to adoration, and my affection was fully reciprocated. My parents and friends tried to prevent a marriage, fearful of the result. They knew and I knew that there was hereditary in sanity in the lady's family. But nothing could deter me from following my heart's

nclinations.
"The wedding day was fixed, and on the evening preceding the morning which was to smile upon our happiness I was alone with my betrothed. Some trivial subject came up for discussion, and I made a joking remark which threw the lady into such taxible spaces. terrible anger as I never saw any person terrible anger as I never saw any person exhibit either before or since. I apologized, reasoned, expostulated, all to no avail. Suddenly my bride that was to be drew a long knife, which she must have had secreted about her person, and attacked me. You can still see the scar left upon my shoulder. I cried out; the family and the servant come raphing in and the frighting terrible and the frighting servants came rushing in, and the frightful truth soon became evident to all; my love

was a raving maniac!
"I rushed from the house, almost distracted, never to enter it or look again upon the face of the beautiful being I had fondly hoped to make my wife. I waited only to learn the verdict of the learned physicians who had been called, and when I heard it— "incurable"—I made hasty preparations for leaving the familiar scenes which had of my most valued books-I had always been a great student—I packed them with some clothing in a small trunk, and secretly left home—forever! I suppose I was half mad myself. Not till I reached these shores did I bethink myself of the sorrow and anxiety my aged parents might have on my account. Then I wrote to them, but gave no address, and stated that I should never return. I heard from home, however, through my benefactor's corre-spondence, and learned that my father and mother had died within a few months after my departure. The lady I loved-" Here the voice of the speaker faltered

and sinking to a whisper pronounced the words with a difficult effort. "She perished—in a madhouse—years ago. In trying to earn my own living by my own labor—a task I had never attempted before—far from all I once held dear, I have vainly sought the forgetfulness which I shall never find this side the grave. This